Application No. 10/050,000

Amendment dated August 9, 2007

Reply to Office Action of February 9, 2007

AMENDMENTS TO THE CLAIMS

Docket No.: 0365-0529P

1. (Currently Amended) A method for decreasing the foam formation during cultivation of a fungal production host <u>Trichoderma</u> production host, characterized in that the process comprises the steps of

- genetically modifying the fungal production host <u>Trichoderma</u> production host does not produce an essential amount produces at least 50 % less HFBI or HFBII or both during cultivation, compared to the non-modified parent host strain thereby producing a modified <u>Trichoderma</u> production host; and of at least one of the proteins, polypeptides or peptides associated with foam formation during cultivation, said proteins, polypeptides or peptides being amphipathic or hydrophobic proteins, polypeptides or peptides or lipoproteins; and

- cultivating the fungal-production host modified *Trichoderma* production host under suitable culture conditions.

- 2. (Cancelled).
- 3. (Cancelled).
- 4. (Cancelled).

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5. (Original) The method of claim 1 characterized in that the genetic modification comprises genetic modification of a DNA sequence encoding a protein, polypeptide or peptide regulating the production of at least one of the proteins, polypeptides or peptides associated with foam formation.

- 6. (Previously Presented) The method of claim 1, characterized in that the genetic modification comprises genetic modification of the regulatory region of a gene encoding at least one of the proteins, polypeptides or peptides associated with foam formation.
- 7. (Previously Presented) The method of claim 1, characterized in that the genetic modification comprises genetic modification of a DNA sequence encoding at least one of the proteins, polypeptides or peptides associated with foam formation.
- 8. (Original) The method of claim 7, characterized in that genetic modification comprises inactivation of a DNA sequence encoding at least one of the proteins, polypeptides or peptides associated with foam formation.
- 9. (Original) The method of claim 8, characterized in that the genetic modification comprises deletion of a DNA sequence encoding at least one of the proteins or polypeptides or peptides associated with foam formation.

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10. (Withdrawn) A method for producing a product by cultivating a microorganism,

characterized in that the process comprises the steps of

- modifying the microorganism in such a way that the microorganism does not produce

an essential amount of at least one of the proteins, polypeptides or peptides associated

with foam formation during cultivation, said proteins, polypeptides or peptides being

amphipathic or hydrophobic proteins, polypeptides or peptides, not including lipopeptides or

lipoproteins;

- cultivating the microorganism under suitable culture conditions; and

- recovering the product from the cultivation.

11. (Withdrawn) The method of claim 10, characterized in that the product is a protein or

a metabolite or biomass.

12. (Withdrawn) The method of claim 10, characterized in that the product is a

recombinant product.

13. (Withdrawn) A production host strain, characterized in that the host strain is

genetically modified not to produce an essential amount of at least one of the amphipathic or

hydrophobic proteins, polypeptides or peptides associated with foam formation during

cultivation of the non-modified production host strain, said proteins, polypeptides or peptides

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being amphipathic or hydrophobic proteins, polypeptides or peptides, not including lipopeptides or lipoproteins.

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14. - 31. (Cancelled).

32. (Previously Presented) The method of claim 1, wherein said cultivation is carried out

in the presence of agitation and/or aeration.

33. (Previously Presented) The method of claim 1, wherein said cultivation occurs in a

fermentor.

34. (Previously Presented) The method of claim 33, wherein said fermentor is an airlift

fermentor.

35. (New) The method of claim 1, wherein the *Trichoderma* production host produces

60-80 % less HFBI or HFBII or both during cultivation, compared to the non-modified parent

host strain.

36. (New) The method of claim 1, wherein the *Trichoderma* production host produces

80-100 % less HFBI or HFBII or both during cultivation, compared to the non-modified parent

host strain.

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37. (New) The method of claim 1, wherein the *Trichoderma* production host is *Trichoderma reesei*.

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- 38. (New) The method of claim 37, wherein the *Trichoderma* production host is *Trichoderma reesei* selected from the group consisting of QM9414 (VTT-D-74075), Rut-C30 (VTT-D-86271) and QM9414 Δ*hfb1* (VTT-D-99724).
- 39. (New) A method for decreasing the foam formation during cultivation of a Trichoderma reesei production host, characterized in that the process comprises the steps of
- genetically modifying the *Trichoderma reesei* production host in such a way that the *Trichoderma reesei* production host produces at least 50 % less HFBI or HFBII or both during cultivation, compared to the non-modified parent host strain thereby producing a modified *Trichoderma reesei* production host; and
- cultivating the modified *Trichoderma reesei* production host under suitable culture conditions in the presence of agitation and/or aeration in an airlift fermentor.
- 40. (New) The method according to Claim 39, wherein the *Trichoderma reesei* production host is *Trichoderma reesei* selected from the group consisting of QM9414 (VTT-D-74075), Rut-C30 (VTT-D-86271) and QM9414 Δ*hfb1* (VTT-D-99724).

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41. (New) The method according to Claim 39, wherein the *Trichoderma reesei* production host produces 80-100 % less HFBI or HFBII or both during cultivation, compared to the non-modified parent host strain.

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42. (New) The method according to Claim 39, wherein the cultivation is performed in the absence of antifoaming agent.